some of the theoretical discussions: thus Bubeník's argument against Lupaş's phonemic interpretation of diphthongs as vowel sequences (p. 74 n.1) depends crucially on the assumption that syllables and their boundaries have no phonological status, an assumption seemingly considered too self-evident to need stating.

The most valuable part of the book is chapter four, on accent, where there is a coherent and enlightening presentation of the development of the Greek accent system (or rather systems — for Bubeník shows that there were three quite distinct types of accentual system in different dialect groups) from prehistoric to classical times and beyond. I am less sure than the author (pp. 163ff) that it would have been hard to maintain a contrast between rising and falling tone contours within the syllable: Japanese does it easily enough, to say nothing of true tone languages.

This book leaves one very disappointed. There is need for a synthesis like that attempted here — one that would combine the scholarship of Lejeune (1972) with the theoretical and typological advances of recent phonological research. But to publish this book, in this form, in 1983, was a serious mistake.

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B. Butterworth (ed.): *Language Production*, vol. II: *Development, Writing and Other Language Processes*. London: Academic Press, 1983.

LANGUAGE is what linguists and psychologists study; phoneticians prefer to think of themselves as studying SPEECH; sociolinguists study talk. Volume I of Brian Butterworth's two-part survey, *Language Production*, cleverly touched all bases; its subtitle was *Speech and Talk*. It included,

accordingly, a wide variety of approaches to the study of speaking in a variety of usual and unusual circumstances, from a wide variety of disciplinary perspectives.

But language production is not just speaking. Signing is also language production. Writing is language production. Tapping Morse code is language production. Singing is language production. Volume II of *Language Production* broadens the survey's scope by considering at least some of the aspects of production research which were ignored in volume I. It contains two chapters on language development, two on writing, and three on aspects of the relation between production and perception.

Because the relation between input and output is crucial in explaining language development, the first two chapters in fact also have a lot to say on this latter topic. These two chapters complement each other — Menn first discusses phonatory and phonological development, McShane and Dockrell follow with a discussion of lexical and grammatical development. The two chapters are quite different in style. Menn's is a characteristically first-rate exposition, embodying a convincing argument that the entire class of embryo-development models is inadequate to account for the data on the acquisition of phonology; the correct model must be a member of the class of problem-solving models. Menn's own version of a problem-solving model involves the construction of articulatory programs of ever-increasing specificity. McShane and Dockrell's treatment of lexical/grammatical acquisition is a thorough tutorial essay on the major theoretical approaches to these topics in the past two decades, with a rather depressing conclusion. The authors are unhappy with all existing models (although surprisingly, they claim [p. 70] that 'no theory has failed to solve all aspects of the problem'); they plead for greater awareness in future of the intimate relation between what the theory is and what gets studied. The authors of both papers, however, are in agreement that at least in the area of language development the 'elegant theory', the model which seeks to explain a diversity of phenomena by a single unifying principle, is very likely to be wrong because it will be too simplistic — language development is so complex a phenomenon that no simple theory will ever suffice.

Writing, according to Viviani and Terzuolo, is a 'vicarious means of language production', although one might consider that description more appropriate to the speech of the ventriloquist's doll, or to the speaking in tongues of one possessed. The two writing chapters are also complementary — Viviani and Terzuolo deal with the motoric aspects, Hotopf with the cognitive; but unlike the development chapters, they are not heavily concerned with major issues of theory. Viviani and Terzuolo review their own and others' work on motor control of handwriting and typing in

considerable detail. Hotopf continues his arguments from a previous paper of his on the same topic (slips of the pen), clarifying issues which have apparently arisen in discussion of the earlier work. He has some very telling examples, which he discusses enlighteningly; but he rightly points out that rare slips are not by themselves, without the backup of empirical tests, an adequate basis for a processing model.

The final section returns to the consideration of basic theory. Howell and Harvey offer a clear statement of the explanatory problems arising in comparing the production and perception of speech and a good review of much of the (extensive) theory relating to this issue in phonetics. Their conclusion — again a depressing one — is that awkward problems still remain for all hitherto postulated solutions.

Cooper and Zurif draw on aphasia data in their chapter, which has two almost unlinked parts. The first part argues, in a way very reminiscent of the approach taken since the early 1970s by Egon Weigl's aphasia group in East Berlin, that the distinction between expressive and receptive aphasias is invalid; all kinds of aphasic disorder involve central processes to some degree. The second part reviews the first author's recent work on prosodic disturbance in various aphasic syndromes; this work provided additional evidence that, as many models of language production based on evidence from normal populations claim, speech timing and intonation involve separate planning processes.

The editor's final chapter sets up some strong hypotheses about lexical representation and tests them against the production and perception evidence. For the third time, the conclusion is rather depressing: 'There is little solid evidence to support the strongest theories of lexical representation, and considerable evidence in favour of weaker alternatives'. Alas, this conclusion has been forced by the formulation chosen for the stronger claims. For instance, it is not surprising that 'the idea that only base forms are listed, with inflectional or derivational compounds being computed on line by rule, is not well-supported'. This is because the evidence clearly supports a principled separation between inflectional and derivational affixations — the former certainly appear to be computed on line, the latter do not. Conflating the two creates an artificially 'strong' hypothesis which is doomed to fail. Butterworth has made a brave attempt at defining the class of adequate models of lexical representation; but one feels that a more effective use of this careful summary of a mass of evidence might have been to use it to argue not against straw hypotheses, but against actual published models.

Together the two volumes of *Language Production* provide admirable coverage of current research in this area. Volume II does not rival volume I in size or scope, because volume I after all covered the central issues —

speaking is the primary form of language production. And given volume II's dismal proofreading standards, it doesn't rival Volume I in presentation either. Nonetheless, it is a successful effort at making coverage of the topic more nearly complete. A junior partner, but a worthy one.

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Keith Brown: *Linguistics Today*. Fontana Linguistics. Fontana, 1984. 283 pp. £3.95.

Writing a book on an academic subject in a 'lucid and nontechnical way', which is the aim of the Fontana Linguistics series (p. 7), is a difficult thing to do, and one that most scholars avoid; but when it is done well, as it is with this book, it is very worthwhile.

The reviewer's task is difficult too. Detailed criticism of the subject matter is unfair, for issues must be simplified and important points omitted in such a book, and there can never be agreement about the presentation and choice of topics or the theoretical stance of the author.

Yet there is one fair major criticism of this book — that it is not about 'linguistics today', but about one part of the subject. In the first paragraph of the text (p. 9), we read, 'The principal task of linguistics is to investigate and describe the ways in which words may be combined and manipulated to convey meanings. This is generally labelled "syntax".' This may be a fashionable view of linguistics, but it is unwarranted. Phonetics and phonology are no less important or basic, and the same may be said for semantics. Yet the subject matter of this book is not quite as narrow as the quotation suggests, for chapter 3 deals mainly with morphology, which is, on a traditional view, one of the components (together with syntax) of grammar, while chapter 8 moves in the direction of meaning.

The first two chapters, 'Language and communication' and 'Models of language', are of a general theoretical kind. It is useful to have an account of familiar linguistic attitudes and beliefs, but it might have been wise to omit or question some of the less-convincing suggestions. Halliday's 'three kinds of meaning' (p. 11ff), for instance, lumps together extralinguistic, ('world about us') 'transactional', and 'interactional' meanings with intralinguistic 'textual' meaning, which is a matter of form (in the 'form'/'meaning' sense). There is a rather unsatisfactory section on 'decontextualization' (pp. 41–42), which misses the point that this is a necessary, but dangerous, methodological procedure that, when given theoretical significance, leads to the unfortunate dichotomies of competence and performance and of semantics and pragmatics.